MIORMATION REPORT

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CENTRAL INTELLIGENCE AGENCY

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	S-R-C-R-E-T			
COUNTRY	East Germany	REPORT		
SUBJECT	 Oxygen Production in East Germany The VEB Samerstoffwork, Berlin- Niederschoensweide 	DATE DISTR.	23 May 1955 4	25X1
DATE OF INFO.	•	REQUIREMENT NO.	RD	25X1
DATE ACQUIRED	This is UNEVALUATED In	ormation	ATIVE.	

The following is the oxygen-producing capacity of East Germany as of the end of October 1954:

Plant	Available as of 30 Oot 54	o metere per ho or This, Added Since 1 Jan 52	TO DO Added	Capacity at end of	1955
Babelsberg	120	•	-	120	25 X 1
Dresden	500	300 (2)	600 (6)	1,100	
Bue taow	7100	•	-	100	
Chemnits	200	200	•	200	
Schwarzenberg	600	400	•	600	
Brandenburg	100	-	200 (7)	300	
Plauen	220	-	-	220	•
Leipzig	1400	120 (3)	-	1400	
Kleindalzig	100	• .	-	100	
Hirschfelde	400	200	-	1400	
Mafa-Wursen (Wursen Machinery Factory)	125	125	•	125	
Berlin	200 (1)	-	200 (8)	7100	
Magdeburg	400	120 (h)	-	100	
Erfurt	320	120 (5)	-	320	
E.a.E. (Erich am Ende) Berlin Total	200 4,285	120 1,705	1,000	2 00 5,285	
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In the above tabulation, the numbers in parentheses indicate the following:

(1)	The 200-cubic-meter	installation	was	obtained	from	the	Messer i	irm.	in
	Frankfurt/Main.								

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The 120-cubic-meter installation came from Messer, Frankfurt/Main. (3)

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(5)

- (6) This 600-cubic-meter installation is to produce liquid oxygen. Delivery date is end of 1955.
- (7) Delivery date for this 200-cubic-meter installation is mid-1955.
- (8) This 200-cubic-meter installation was put into operation 1 November 1954.
- In addition to the plants listed a bove, there are also some others, concerning which information as of 1952 is available:

	Capacity, cubic meters per year
Niederlausitzer Sauerstoff GmbH (Niederlausitz Oxygen Company, Ltd.)	180,000
Brandenburgischer Bergbau (Brandenburg Mining Company)	265,000
Beck, Brandenburg	72,000
Weinhuebel	520,000
Staaken	150,000
Total	1,187,000

- All the aforementioned plants except Brich am Ende Berlin and Staaken are under the VVB Technische Gase (VVB for Industrial Gases), Coswig. Erich am Ende Berlin and Staaken are under the Magistrat of Berlin.
- In addition to the above plants, the following enterprises have their own plant installations, which were produced by Mafa-Wurzen (formerly Schuetz Compressor Company), which has about 450 employees:

Plant	Capacity (cubic meters per hour)	Year Built	Used for:
Neptumwerft, Rostock	50	1953	Welding and cutting
Seidenwerk Pirna (Silk Works Pirna)	50	1953	Production of syn- thetic fiber
Stahlwerk Riesa	50	1953	Welding and cutting
Maxhuette Unterwellenborn	3,000	1953	Air blast in the blast furnaces

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- 5. The last-named plant has a Linde-Fraenkel installation, dismantled by the Luetzkendorf refinery, which produces 90-percent oxygen, adequate for the purpose for which it is used.
- 6. There are also large installations at the Leunawerk and Bunawerk plants, and also at Stickstoff-Werk Piesteritz, which separate air into its components, but which are mainly concerned with the production of nitrogen and produce oxygen only as a by-product. This output helps to overcome the shortage of oxygen in the metal-processing industry. No details are known as to this supplemental capacity.
- 7. The following indicates the development of oxygen-producing capacity in Hast Germany:
 - a. End of 1951

Capacity: 2,617 cubic meters per hour 2,617 x 24 x 360 =

22,600,000 cubic memors per year 25X1

b. 30 October 1954

Capacity: 4,422 cubic meters per hour 4,422 x 24 x 360 =

38,200,000 oubic meters per year

c. After the Berlin installation begins operating at the beginning of November 195k

Capacity: 4,622 cubic meters per hour 4,622 x 24 x 360 =

40,000,000 cubic meters per year

d. After installations now under construction have been put in operation

Capacity: 5,422 cubic meters per hour 5,422 x 24 x 360 =

47,000,000 cubic meters

- 8. The above computations do not include the plant installations at the Neptun-Werke or at the Pirna, Riesa, or Maxhuette plants, since these are all geared to local use. The same is true of the installations at Leuna, Buna, and Piesteritz.
- 9. When an annual capacity of 47 million cubic meters of oxygen is attained, it will be possible approximately to cover current requirements.
- 10. VEB Sauerstoffwork, Berlin-Niederschoensweide, Schnellerstrasse 6-lk (Status as of the end of October 1954); The plant was built in 1951 with investment funds running through the end of 1954, amounting to a total of 4.5 million DM. The affiliations have been as follows:
 - a. 1951-1953, under VVB Oxyka, Radebeul
 - b. 1953-June 1954, under VVB Berlin
 - c. July 1951 September 1954, directly under the Main Administration for Chemicals in the Ministry of Heavy Industry
 - d. Since September 1954, under VVB Technische Gase, in Coswig, Anhalt, the head of which is Renneberg (fnu).

The personnel comprises 100 employees, of whom 60-percent are administrative and 40-percent are factory workers; 30-percent are women; there are two apprentices.

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- 11. Important sections of the plant are the oxygen-nitrogen department and the rare gases department.
- 12. In 1951, an installation for the separation of the constituents of air was built by the Messer firm, Frankfurt/Main. This installation had a capacity of 200 cubic meters per hour of oxygen and 3.4 cubic meters per hour of heliumneon mixture (in the ratio 78:22). In 1953, construction of an additional installation was started by the Mafa-Wurzen firm. This installation has a capacity of 200 cubic meters per hour of oxygen, 50 cubic meters per hour of nitrogen, and 1.5 cubic meters per hour of argon. The installation began operations in November 1954.
- 13. The Flan quota of 1,770,000 cubic meters of oxygen will be fulfilled. The price of oxygen is .60 DM per cubic meter for consumers using over 1,000 cubic meters per month and 1.20 DM per cubic meter for consumers using less.
- 14. The price of argon is 18.50 DM per liter for 94-percent argon (containing 6-percent nitrogen); the price in West Germany is 23.00 DM. Sales of argon are to start in November 1954. The price for helium-neon mixture, in the ratio 78:22, nitrogen-free, is 12.50 DM per liter, or somewhat below the world market price. Mitrogen is not being produced at present. The new installation, which is to start operations at the beginning of November 1954, will produce 50 cubic meters of nitrogen per hour. The price of nitrogen will be .56 DM per cubic meter.
- 15. Sodium hydroxide and sodium carbonate come from Bernburg.
- 16. Oxygen is used by the metal-processing industry forwelding and cutting. The distribution area is Berlin and the surrounding area, including Eisenhuetten-Kombinat J. W. St lin, Fuerstenberg/O. The largest quantities of oxygen go to the Berliner Gluehlampenwork and the HF Werk in Oberschoensweide. Nitrogen will go the Berliner Gluehlampenwerk, to be used to fill light bulbs. However, the principal consumer will be the HF Werk in Oberschoensweide. The helium-neon mixture is also used for filling light bulbs. The capacity output of this mixture, which amounts to 3.4 cubic meters per hour or about 30,000 cubic meters per year, cannot be utilized. Requirements amount to 3.5 cubic meters per year, which can be produced in a little over an hour. The capacity figure of 30,000 cubic meters per year was established on the basis of a survey of requirements conducted by the DHZ (Deutsche Handelzentralen), which was based on export plans which could not be realized. Argon is supplied in a 94-percent pure grade, against an acceptance guarantee for 93-percent purity. It is used to fill incandescent light bulbs. For arc-welding, 97-percent pure argon is required. Argon could be furnished in this quality, but then the capacity would be inadequate. The capacity was originally planned to be 8 cubic meters per hour, but actually it is only 1.5 cubic meters per hour, so that there is no surplus of argon for welding.
- 17. A new installation, produced by Mafa-Wurzen, which can produce 200 cubic meters of oxygen and 50 cubic meters of 99.9-percent pure nitrogen per hour, has been completed. It is to start operating 1 November 1954. Development work is being conducted in the research department of the plant concerning the separation of helium and neon in the helium-neon mixture.
- 18. In order to conserve on steel cylinders, transportation costs, and manpower, a ring main was built leading from the Berlin-Schoensweide Plant to the following plants: Halbseugwerk II, Transformatorenwerk Oberschoensweide, Geraelebau Oberschee, Kabelwerk Oberspree, and the HF Werk fuer Fernmeldewesen. The main cost 156,000 DM and is 3.5 kilometers long. It was put into operation in mid-1954. It can handle 800,000 cubic meters per year.
- 19. A second conduit is being laid alongside as far as the HF plant, to carry nitrogen.

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